

Hardcopy

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Submissions to the newsletter may be made via the clubs' BBS, via mail, or at the general meetings.

We wish to thank the following people for their contributions in helping to get this newsletter published:

James D. Craig

Ralph Fenner

Jace Gill

Paul Grover

Jonathan Mordosky

Ron Motley

Michael Skuczas

Bonnie Strohl

Thank You,

Bernie Blasko, John Dashner, and Joe Souder, The Editors

ABE's ACEs

Allentown Bethlehem Easton's Atari Computer Enthusiasts is an independent user group organized and run by owners of Atari Computers. Atari is a trademark of Atari Corp. All references should be so noted.

If you would like more information about ABE's ACEs, write us at the club's address or call the club HOTLINE listed on the last page.

ABE's ACEs meets the second Saturday of every month at:

NCACC

Keystone Classroom 217/218

LVAUG

Lehigh Valley Atari Users Group

Meets the first Thursday of every month at:

Lincoln Technical Institute

5151 Tilghmen St.

Allentown, PA 18105

A Message From The Vice President of LVAUG

Ron Motley (LVAUG)

After a year as a club officer I feel comfortable to see the club moving back to the directions planned by the club originators. I do feel we still have a way to go yet to get back to the principles as written in the by-laws of the club.

Member attitude a year ago was a low due to quite a few factors. Some of these factors include the apparent non-support of Atari & Third Party Manufacturers and the disinterest of and non participation of club members. During that time the club could not get a full functional staff of officers with vacancies being filled by members who missed the nomination meetings

We are presently seeing a revised interest in the Atari 8-Bit community with new product releases such as the The Atari Dos XE, Newsroom & the Turbo S:16. Also increased support being shown by Atari Inc. with recent calls for 3rd party support and the release of XEGS (the hidden computer).

Now with the momentum in the market finally willing to look our way, we have a good chance to help strengthen the Atari 8-Bit Market! One thing I have learned for sure is that the club will only give you what you are willing to give it.

It's agreed that not everyone can get up & run a meeting or support a BBS full time. But how about what you like to do on the computer? Do you use the computer for work? How about games? What programs do you use the most?

Active support for the club need not be a full time commitment. Write letters to manufacturers for newsletter advertising! Submit an article for publication! Or just be willing to demo a piece of those old faithful programs us old timers use for benefit of the members. Offer to help teach or participate and learn through the clubs S.I.G.'S.

Active support could be as simple as telling us what you would like to see the club do! How can we as a group help you enjoy your computer system.

The Lehigh Valley Atari Users Group will only go as far as it members are willing to see it go.

LVAUG March Meeting Highlights

Bonnie Strohl (LVAUG)

Several things are going to be happening in our near future with the LVAUG! I think that this is going to be the turning point in the club, and especially for the members of the club. For those that are not aware of the recent happenings, this is what you have missed.

There were meetings that discussed the possibility of a joint Newsletter for those that had a club too small to cover the cost of producing their own club paper. To account for the ones that needed financial backing, a proposal was made to combine Newsletters to lower the cost for all that were involved. It was brought up in the recent meetings only to get little or no response from all concerned. But as the weeks passed, there seemed to be a change in the initial interest. Things were finally

being discussed and things got rolling.

At the last ABE's ACEs meeting, a few of the LVAUG members were there to help promote the idea of the joint newsletter. The idea was brought to their members, and things were finally agreed upon as to what was the best approach, etc. Because of that meeting, we moved closer to getting the joint newsletter to the press!

Many other topics had been discussed at LVAUG's last meeting. As of this meeting, the NEW editors of the Newsletter are going to be John Dashner & Bernie Blasko, both from LVAUG, and Joe Souder of ABE's ACEs. The three of them are going to share the responsibility of producing the clubs' paper. They will be working together to get the joint newsletter going.

The Atari club from Reading has decided to turn the joint offer down for the time being. They have said that there is a little problem on the choices for the Editor of their own paper. They also feel that they have nothing to contribute in the way of club news articles. Jerry says that the idea would be again brought to their attention. Maybe in the future, it will bring different results.

Nominations were made for the NEW officers of the club. Among these nominees were:

President, Ronald Motley

Vice Pres, Johnathan Mordosky

Parliamentarian, Paul Grover & Mark Bray

Secretary, Bonnie Strohl

Discussions were made on the possibilities of starting some SIGS. Primary topic being one for the start of a programming sig. We need ideas for this matter. And a suggestion is made for those that have not taken the new survey on one of the 3 bulletin boards that support the club to take that survey as soon as it is possible.

Last of all, there was talk among those that were interested in Keith Ledbetter's new Express Cartridge. There were several that seemed interested in purchasing this item. I have since the meeting gone onto Keith's board and asked if there was going to be any discount for the clubs that ordered this item in bulk...But as of this date, 3/06/89, there has not been a reply from Keith.

You Should Have Been There

Bonnie Strohl (LVAUG)

February 22, 1989..... I don't believe that you didn't show! This was the main talk that was going on after the recent Bowling Party on Sat. Feb.18th.

For the last event everyone met at the Town & Country Lanes over in Bethlehem. This time we all went to the Mountainville Bowling Lanes in Allentown.

Not as many showed for the second bowl-a-thon, which kind of irked those that did make it. You know how it is when you are waiting for people that say that they are going to make it for your team, and then you stand around and wait for them...wasting time that could be spent bowling.

I thought that the night went really good though, considering there were only 13 people that came. We had entertainment by a DJ, and the opportunity to bowl for free games too! (If you bowl anything like I do, then you relied on others to get you the free games!).

Quite a few of us were bowling our normal (yukky) ways, but others were doing fairly good. Mark Bray even came up with a NEWER version to approaching the foul line!

Plenty of pictures were being taken. I am supposed to be getting them in the mail soon. When they come, I will try to remember to bring them for everyone to see. I am sure though that everyone has seen pictures of people enjoying themselves.

I think that it would be a good idea if more people would try to make it to these things. It is something that not all like to do, granted they even make it there. But I think that the more the people get together, the more that they can grow together...As friends and as mutual club members..We should try to see if there is an interest greater than the bowling parties, and go from there. What do you think people? What are some things that you would be willing to do together as a club?

Results:

1. Highest average bowled: Ron Bowen - 156
2. Highest game bowled: Frank Kozero - 173

There were good scores all night long. Everyone always ends a winner when Rosie is bowling too! Haha...

Atari April Extra! James D. Craig

In a news release dated 4/1/89, Atari Executive Em Barris announced some surprising new developments for the Corporation.

Speaking from his Bogus Avenue office in Funnyvale CA, Barris said, "No more games! Although we will continue to service the game machines and supply parts when needed for repairs, our total marketing thrust will henceforth be devoted exclusively to computers and computer peripherals."

"We will also be re-releasing all formerly offered Atari computers, from the 16K 400 to the 4MB MEGA 4, but all now at half price," Barris went on. "And there will be a new entry in the MEGA line, the MEGADEF, with 2 30MB hard drives and 32MB of RAM." The MEGADEF systems will not be for sale, but will be loaned to Atari User Group BBSs at no charge, in appreciation for their years of loyalty.

Barris promised "a new dawn for the Atari computer user. 200 of the country's most knowledgeable Atarians will be paid to network in a free information service. Calls which require our company's direct response will get immediate attention from our 24 hour hot line. Repairs will be handled through a grid of 60 new Atari showrooms / service centers set up across the contiguous U.S.A."

With tears welling in his eyes and an emotional tremor in his voice, Barris vowed, "Never again will there be another dissatisfied Atari computer user. Remember our new motto - 'Pride Before Profit!'

Being A Sysop, Or Not? Bonnie Strohl (LV AUG)

*(Sysop*Rose)*
The Wishing Well BBS

If there is one question that I am asked often, it is why I did I become a sysOp. Well I often stopped to ask myself this very same question. Hm...There are times that being a sysOp has it's moments! Let's see if I can explain the joys (he he) of being in demand, 25 hours a day, and 8 days a week.

The board is running great! Then all of a sudden you come home from a long day at the office and find the program is printing these neat little characters all across the screen. Oh joy, another trial and run error to find out what went wrong again! If that isn't bad enough, then your users give you the ol' one two on why the board was down all this time! Geez...it is made by man (not the most perfect product)... After you answer this question in e-mail for the 100th time, then you have to go through the ordeal of posting that same paragraph in the message base! Granted...there are those that don't ask the same terrific question in feedback, but none the less, you have to let them know also.

Just about this time you get the other telephone line ringing. On the other end is someone that wants to talk shop. Thinking that you are really hungry, and would rather grab a bite to eat, you sit there and exchange the pros and cons of the problems of the program in question, and then hang up to answer the knock on your door! Oh shoot, there is a page request on the board.

You pardon yourself from the company to answer the page. It is someone that needs you to explain the basics of uploading a program for the Commodore Users. Thinking to yourself that the page should have gone unanswered, you try to explain something that you don't fully understand yourself.

Seriously, this is just an example of the exasperation that one can feel through the days journey at the sysOp's keyboard. I am not saying that this is all there is to running a board, but there is truth behind this theory that I am projecting here. I guess that I am just trying to tell those that are thinking of running their own, that it is NOT just a hobby...It is more like a second job that takes work, and all the spare time that you have got and you spend money on rather than getting paid.

If you expect to put one of these things up, then you also have to expect the users to expect some of that time of yours. Posting an advertisement that you are starting a Bbs is like posting a banner that states "Call Here, I Want To Be In Demand"! Don't get me wrong, I like being a sysOp. Just like everything else... it has it's good points and it's bad. The feelings that I get watching the users post to one another on a daily basis, and having fun too, is one of the things that I enjoy the most. Or when you spent all that extra time on the menus to change them again (and they actually noticed), makes me feel like I truly accomplished something! And the helping one another that the users do gives me a warm feeling. All these things are what make me feel good about running the board. But most importantly this is what makes it a "pleasure" to be the boards sysOp!

DOS XE: A Promise Fulfilled

Jonathan Mordosky (LV AUG)

There was much anticipation in booting up DOS XE for the first time. Several years of work by the famous Bill Wilkinson and others was complete. The new and powerful DOS XE had arrived. I loaded the disk and the MAIN MENU appeared. I checked out the other menus. I made a copy of my master disk and set the date.

Then a sadness came over me. THIS was the new and powerful DOS XE. It seemed to lead me like a child, taking my hand through every step. To duplicate a disk, first press [S]-[RETURN] for SYSTEM FUNCTION MENU. From the SYSTEM FUNCTION MENU press [D]-[RETURN] for DUPLICATE A DISK. Next comes the warning: CAUTION! THIS OPERATION DESTROYS PROGRAM AREA. You must now PUSH [START] TO CONTINUE. You are asked DUPLICATE FROM WHAT DRIVE NUMBER? Type in the appropriate number [*]-[RETURN]. You are now asked DUPLICATE TO WHAT DRIVE NUMBER? Type in the

appropriate number [*]-[RETURN]. Next you are told PUT TO DISK IN DRIVE *. PUT FROM DISK IN DRIVE *. PUSH START TO CONTINUE. You push [START] and finally it starts to duplicate a disk. If you have made a mistake you will get an error number and a simple error message, such as DISK PROBABLY WRITE PROTECTED or CAN'T INITIALIZE DISK. All I wanted to do was make a copy of the master disk. All these prompts were a real pain. How could Atari do this? I put the disks away, turned off the computer and went to bed.

The next day, DOS XE began to make sense. There was a purpose to all this. Atari had to address many goals with the new DOS. The first was making it easy to use. Most people purchase their Atari as a first computer. The likely place of purchase is a toy or department store. They receive little or no support from the sales person. They are on their own. The second problem was making it powerful enough for the intermediate user. It had to address their needs and overcome the limitations of past Atari DOSes. The third and greatest challenge all, was making it work with the memory available on most 8-bit Atari computers.

To begin with, the user interface is separated into four menus. From a MAIN MENU, you can choose the FILE ACCESS MENU, MACHINE LANGUAGE ACCESS MENU, SYSTEM FUNCTION MENU or EXIT TO BASIC. DOS XE has the most descriptive interface of any DOS I have seen. The menus are clear and straight forward. As you use the functions, there are many prompts which help avoid mistakes. As you outgrow these menus, you are able to list many commands at a single prompt and speed through the functions. One way to make a duplicate disk is type the following command line at a prompt: S D 1 2 ; and press [RETURN]. If you haven't already destroyed the program area, you are told to push [START]. If you have already destroyed this area of memory, simply put the TO disk in drive #2 and the FROM disk in drive #1, press [START]. Presto! The disk in drive #2 is formatted and a copy of the disk in drive #1 is made. There is a good explanation of this command line feature in the Owner's Manual.

DOS XE answers most of the complaints made by Atari users over the years. It is memory resident, except for a few specialized tasks. You no longer need a DOS disk handy to copy files or initialize a disk. Once booted, it remains in memory until the computer is turned off. There are real error messages. Besides the error number, you also get an English error message when something goes wrong. It adds many other features never found in previous Atari DOSes. These features include: subdirectories, date stamping of files, batch files, a view file function and extensive support for basic and machine language programming.

Many of the features in DOS 2.0 and 2.5 were limited by the disk structure. To overcome these limitations a new disk structure was created. This new structure allows up to 1250

files and subdirectories in each directory. And each subdirectory can contain even more files and more subdirectories. As a result the number of files is only limited by the size of the disk. Which in the case of DOS XE is 16 Megabytes. This a far cry from the 64 file and 130K limit of DOS 2.5.

To see some of the new features, just list the files on a disk. DOS XE displays your working directory pathname at the top of the menu screen. It shows you which files or subdirectories are protected. It also lists two dates next to each file or subdirectory. The first date is the date the file or subdirectory was created. The second date is the last date it was copied, updated or had material appended to it. The size of the file is given in bytes. You no longer have to multiply the number of sectors by the sector size to find out how big a file really is. If a listing is a subdirectory you will find a > instead of a size. This clearly shows which are files and which are subdirectories. One last piece of information is given. The amount of free space on the disk rounded off to the nearest Kbytes or thousand bytes.

DOS XE can be customized for your system. There is an external program named SETUP.COM which allows DOS XE to be configured for different tasks. You can change the number, verify mode and type of drives supported. You can change the maximum number of files that may be open at once. This program will also create AUTORUN.SYS files for installing a 130XE RAM disk, the RS232 handler or to load and run a basic program when booting.

There are presently five types of drives supported by DOS XE. They are: AT810, AT1050, XF551, 130RAM, and SSDD. The first three are for Atari type drives. The fourth is for creating a RAM disk with XL and XE computers with 130K or more of internal RAM. I had no trouble using it on a stock 130XE or a 256K Rambo XL. However, the size of usable RAM disk was 62K on both machines. The fifth choice is SSDD. This stands for Single Sided, Double Density. It works with 1050 drives with US Doublers, Indus GTs, and other disk drives which support true double density. There is good support for configurable drives. An example of this is my Atari 1050 disk drive that is equipped with US Doublers. It was able to format and use disks three ways. Using AT810 it formats single sided, single density for a total of 86k of usable disk space. Using AT1050 it formats dual density to 126K. And using the SSDD, it formats to 178k. Yes, DOS XE works with US Doubler equipped drives; however, it does not support the high speed I/O on them. On my Atari XF551 drive, the available formats are: AT810, AT1050, SSDD, and XF551. It supports the high speed I/O on the XF551 drive and can format disks to 367K. Since DOS XE is externally expandable; larger RAM disks, hard drives and larger capacity disk drives could be supported without rewriting the DOS.

There are many other powerful features in DOS XE. To explain them all, would take a book. The Owners Manual for DOS XE

is just such a book. If you are interested in DOS XE, it is well worth the \$10.00 plus \$3.50 S&H Atari is charging. To get a copy of the disk and manual, send a check for \$13.50 to: Atari Customer Relations; P.O. Box 61657; Sunnyvale, CA. 94088; Attn: DOS XE.

In the second half of this review, we get into the world of subdirectories, command lines and batch files. You will even learn how to write a batch file that can duplicate disks with the press of one or two keys. There is a discussion on compatibility with: other DOSes, software and various hardware. The article ends with an overall view and commentary on DOS XE. Until then, take care, and speed through the functions.

Beginners' Corner

John W. Dashner (LVAUG)

We have had a few inquires concerning information for beginners. With the new entries to the 8 bit Atari World via the XL, XE, and the XE Game Machine, we the editors of LVAUG decided to place the beginners corner in our issues.

It will consist of various formats, and input from anyone will be accepted, including articles, short cuts, reviews of older material, terminology, questions and answers, condensed documentation, etc.

We hope we do not bore the seasoned computer expert but we must remember, we all started at this point at one time, and in order to get new members we must accommodate them too. We will not follow a given format, but choose a random sampling of articles. If anyone has any ideas of articles or topics they would like to see printed here, you can contact the editors via voice phone or through the supporting BBS's of your user group.

We will start this month with some terminology.

DOS- Disk Operating System, controls the transmitting of data to and from a disk, it also keeps track of where the data is on a disk. Notice, DOS as mentioned in this article refers to Atari DOS 2.0, 2.5, and the rarely used 3.0. There are many other DOS's like TOPDOS, MYDOS, SMARTDOS, DOSXL, DOSXE, SPARTA DOS, etc.

FORMAT- The organization of tracks and sectors, prepares a disk for storage of information, this is done from the DOS menu or is sometimes incorporated into some programs.

WRITE PROTECT NOTCH- Rectangular notch on the side of the disk, when this notch is covered on a 5 1/4 inch disk, data on that disk cannot be changed, no data can be stored, or the disk cannot be formatted.

BIT- A single digit of information, a 0 or 1 as used by a computer.

BYTE- Eight bits or digits combined to represent a letter, number, or symbol.

File names usually consist of 8 letters or numbers, and at times 3 extenders. These extenders sometime may tell you how to load a program. In data files the extenders are used for loading data information when asked by the program.

Some common extenders are:

.BAS- Basic program, requires Atari basic to run, can load file from B of DOS (run cartridge). It can also be run from menu programs. If running from DOS, type B (return), and enter RUN "D1:, Filename.bas.

.OBJ or .EXE- These are machine language programs, they can be loaded by using DOS option L (return), enter Filename.obj, or exe (return). These can also be loaded as an Autorun system by holding down option key while loading.

.PIC- Is a picture file.

AMS- Is an Advanced music System file.

.PTR- Printer utility file. You will need a printer to operate.

.DAT- A data file.

.FNT- Font for text files or printer utilities.

.DEM- A DEMO file.

.TXT- Text file, usually need a word processor or DOS C option to read.

.DOC- Documentation file, explains a program

Until next time, keep computing.

Atari Writer Plus on a Hard Drive!

SpartaDOS ver. 2.3 or ver. 3.2 Compatible

LVAUG is now offering other Atari users the chance to use Craig Gaumer's (LVAUG Member) patch which allows you to patch your original AtariWriter Plus disk in order to make it Compatible with Sparta Dos and have some added features that will enhance the power of this widely used word processor.

The added features are as follows:

1. Exit to SpartaDOS and return to AW+ without losing your working copy.
2. Exit to spartados and switch to another subdirectory, then upon returning, AW+ will use the current directory to which you just switched.
3. Exit to SpartaDos and AINIT a disk, RENAME, DELETE a file, or CREDIR (create a directory) You may use any INTERNAL Dos command with the exception of Copy.
4. You can read directories of drives 1 through 8 directly from the AW+ menu (internal Ram Disks are supported)

5. You may run AW+ from a ramdisk as D1: as well as from a hard drive and D1:. The support programs along with main program may reside within a subdirectory to keep from cluttering up the root directory.

Easy to follow documentation is supplied on disk along with the patch. To get this useful patch fill out the order form, enclose a check or money order for \$5 and send it to

Lehigh Valley Atari Users Group

C/O AW+ Patch

P.O. Box 1307

Allentown Pa. 18105-1307

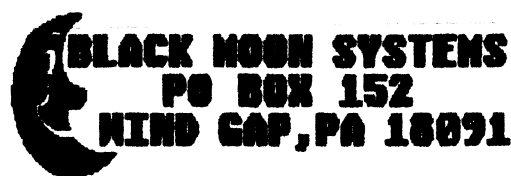
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1050 Drive Transport Into An Indus GT

Rich Mier, SPACE, St. Paul Mn.

Downloaded from GENIE

My Indus Disk Drive has a lot of miles on it and, alas, was coming up with some Strange Errors. After swapping all the socketed chips on the main board, I determined that it must have a bad Read/Write head.

By now I had been using it with the case removed, the Deck resting on the top of the front panel and a wooden pencil across the rear beneath the deck. The TANDON Part No. is 211014-001 and checking around town, I could find no replacement deck, anywhere. Everyone I talked to said I'd have to send it back to Future Systems, or at least go to them for a new deck.

I can't afford to lose my disk. I only have one as I have a 320K XE and a 256K MIO. All I need is one when I have 2-192K RAMDISKS available.

American Techna-Vision advertises a direct replacement Mechanism for a 1050 Drive so I called them to see if it would work in the Indus. They didn't know and couldn't even give me a Tandon Part Number. They did say that they have gotten orders from small companies that repair Indus drives. Taking a chance, I ordered one on the condition that I could return it if it wouldn't work. \$47.50 plus shipping and UPS 2nd day Air. Total, \$56.00. Cheaper than what it was going to cost me if I had to take it to a Dealer or send it out to be fixed.

Monday evening I ordered it and Thursday afternoon it showed up. I checked the Part Number first. Different! Part No. 216024-019. Digging out the wires, I found a couple markings that were the same. Mechanically, it was the same, but on closer examination there were several differences. 1) There was no Timing hole sensors. 2) The plug coming from the Stepper motor had 6 wires versus 5 on the old deck (both have a 6 wire connector). Also, the colors were completely different. 3) The wires coming from the drive motor were the same color, but about 3 inches shorter. (The drive motors were identical). 4) The micro switch against the rod used to twist and engage the floppy had 3 wires on it and the old one, 2. 5) There was 1 less connector plug.

Cutting some plastic tie-wraps on both decks, I traced out the wires. Here's what I found:

The missing connector is J12 (4 pins) on the old deck. It is the timing hole sensor. Well, Atari doesn't use the timing hole. Ignoring it, I went on.

The three wire connector marked '14' on the new drive is the Micro switch marked '5' on the old one and isn't used.

The two wire connector marked 'J12' on the new drive is also 'J12' on the new one. It is the front LED and isn't used on the Indus.

'J11' on both decks is the Write Protect Sensor.

'J10' on the new deck is the same as 'J09' on the old one. The head 'Track 00' sensor.

The wire from the R/W head is a 5 pin connector, same as the old drive, and is long enough to work. There is a difference in colors of the wires to which pins, but the Ground is right. I assumed the difference in wire colors is because of a different manufacturer of the head itself and that the plug was wired correctly to work.

The last one was the Stepper Motor plug, J3 on the old one and '15' on the new deck. A six wire connector. The stepper motors were made by two different companies so maybe it would work as is. Also, on the Indus motor control board, pin 6 was not used. No foil connected to it.

Here is what must be done to make it work:

1. Remove the Motor Control board from the top of the old drive. Note that all the plugs are marked on their top side.
2. The two screws on the top right of the new drive must have the lock washers removed so the motor control board will fit.
3. Arrange and tape the wires coming from the R/W head the same as the old drive.
4. Now the only tricky part of this. The wires coming from the motor are too short. On the Motor Control Board, remove the 4 wire connector (marked J4 on the board) for the motor plug, J1. Use a small soldering iron and a solder 'Sucker'. Turn it around so the pins are pointing to the left and re-solder it in place.
5. Install the Motor Control Board and cardboard insulators on the new deck, taking care to position the R/W connector and that the board and insulators clear the top floppy idler hub.
6. Connect the R/W, 5 pin connector with the '0' up, the same as it was on the original.
7. You will have to cut some plastic tie-wraps to free the drive motor wires. Turn the connector UPSIDE-DOWN, so the 'J1' marking is down and the 4 pin retaining slots are up and plug it into the connector pins that you turned around. Be sure they won't interfere with the head movement.
8. Run the Stepper Motor connector up through the frame as was done on the old deck and plug into the 6 pin connector, the marking '15' up. On mine, the 2 red wires were towards the front of the drive, pin 5 and 6.
9. Locate and clean the two mount holes on the left side of the drive where the label is.
10. On the left side of the old drive, mark on the frame above

the 3 plugs, the 'J' number found on each of the 3, 4 pin connectors as you remove them.

11. Loose the two screws holding the front panel to the Indus frame. On older drives, you might have to remove it as the panel connectors on the bottom board were too high for the deck to clear them.

12. Remove the old drive, 2 screws on each side of the frame, and lift it out. Now is the time to fix that front door if you've had problems with it.

13. With a screwdriver, pry off the front lever on Both drives and swap them. The lever on the new one is too long to fit through the front panel and work

14. Keeping the wires clear, install the new deck, adjust it's position and snug the two screws holding the front panel to the frame. Plug the rear Flat Cable into the Control board.

15. There should be four connectors at the left, rear. The two wire (J12) and the three wire (J14) won't be used. Tuck these away at the rear so they are out of the way and won't short to anything.

16. Find the connector marked J10 and plug this into the front most pins where J09 was on the old deck.

17. Find the connector marked J11 and plug this into the rear most pins where the old J11 was

There, that's it. The now unused pins, J12, won't be used and isn't needed. They were for the Timing Hole sensor. If you REALLY want to, you could maybe pry out the LED and sensor from your old drive and reinstall them, but WHY? They aren't needed.

One thing I did learn from trouble shooting my problem. The Floppy Controller Chip used is capable of controlling a Double Sided drive. It's a Western Digital, 2797 type. Anyone need a challenge? How about a kit for a 5 1/4 inch Double Sided, Double Density drive or how about a 3 1/2 inch drive? 80 tracks, double sided is 720K.

Richard Mier C-Serve 73537,3573 GENIE RBMIER

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President's Corner

Paul Grover (ABE's ACEs)

It is that time and we will have some openings on the Executive Board. I urge any or all of you to help in any way that you can. We are moving forward with the combined newsletter which you are now reading.

The future holds some promise as Atari is selling some game machines and that may help the 8 bit come into some more software. I have seen a lot of previous 8 Bit disk games available now on cartridge. This is a start.

This is our first combined issue of Hardcopy. We need articles, reviews, etc. Please help some way, anyway.

News, Bits, and Commentary

By Frank Kilewer, Reprinted from SLCC Journal

When we last got together here I was digging around trying to find some information on the Comdex show in Lurid Las Vegas. As I was up against a publishing deadline the details I came up with were a bit sketchy but none the less interesting. In the meantime a torrent of more reports have streamed across my phone lines from the COAST and GADM BBSs in Hayward, more on that later. First, a bit of some...Scandalous Data. Were you wondering why David Small left Data Pacific to create his own Mac emulation hardware? Well, the following may not be the complete cause for the split, but undoubtedly helped fuel the departure. As we all know, one must get the blessing of the good ole FCC brotherhood before one starts to sell their computer hardware devices. How many times have we heard that the government was to blame for a delay on long awaited releases? It seems that Data Pacific decided to take matters into their own hands when it came time to start selling the Translator. Not content to just imitate Mac hardware, the boys at DP apparently decided to emulate an FCC approval number and just start selling their creation. Understandably the Feds were not overly amused. But in an exceedingly gracious move they have now officially re-approved the release of the Translator and Data Pacific is once again taking and filling orders.

While we are in this subject area, it seems that David Small got wind of Happy Computer's Discovery cart and made it impractical to rip off a copy of Spectre 128 without ripping the daylight out of the Happy cart, although the Happy is useful in copying Mac disks to Magic Sac format. All of this may become moot soon if David Small, who gets my vote as the best hacker of the decade, released his Mac read/write cartridge that plugs into your disk drive, allowing you r/w Mac disks instantly, no hassles, low cost and very high speed. Mac fanatics

must do a slow burn when they see "their" software run faster, on a larger screen and doing it on a mere Atari. Maybe there is some justice in this world after all.

While I'm getting in some digs on other operating systems, next time you are in Winner's Circle taking advantage of their outstanding selection and club discount, have Vince or Frantz do the Atari vs. Amiga monitor radiation test. Make sure you are wearing your Three Mile Island leisure suit when you approach the Amiga monitor. Let's just say that the Amiga salesmen get a little ticked off when the low level radiation meter is placed in the vicinity of "all those colors."

The December issue of Computer issue of Computer Shopper has an article about a cable, created by Darek Mihoeka, that allows you to hook up an 8 bit drive and read and write 8 bit disks with his latest ST TRANSFORMER. He is still trying to speed up the process a bit more.

Now back to the Comdex goodies. There were around 50 3rd party developers, related to Atari products. Over 110,000 people attended this 5 day (35 hour) show that represented 1,700 vendors. To see everything you had to limit your viewing time at each booth to less than 2 minutes. This does not even take into account the time needed to travel from one location to another. Some of the 14 sites required a travel time of nearly an hour. All rooms within 50 miles of Las Vegas were taken, making it necessary for some to commute from Los Angeles each day (gasp). If that picture does not make you rush right out to make your reservations for next year's gala, Interface Group, that puts on this electronic circus, has already threatened to make the next even bigger. Small wonder, with exhibit space going at \$27 a square foot, one can understand their desire to offer us an even larger selection of vendors to be studied in depth for 60 seconds each.

Sam Tramiel stepped from behind his DRAM shortage excuse to claim that the memory drought is officially over. Mega production is now at 50,000 to 75,000 per month. Though most are still going to Europe, Sam says this reverse colonization is about to cease and we will be getting our M-STs. I have been seeing some regular ads on the CNN network comparing the Mega 2 to the Mac. There was also a large ad in the New York Times. The ad states there is one thing that the Mac does better than the Mega, below is a picture of a hand pulling \$100 bills out of a wallet. So maybe the big push we've all been waiting for is beginning to materialize. Back to the show.

Biolog Systems was showing off MEDI-ST, this is a package designed for physicians. Already in use in France for over two years, this combination database, word processor and telecommunications system can be networked with other doctors. It allows graphics to be stored with individual patient records and includes a password feature for privacy. Visi-Comp Systems caters to eye doctors with a complete professional optometric office management system.

Computer Curriculum Corporation has created an educational package of programs that includes math, reading, language skill and of course, computer education. These programs are available for all age groups. For more information, call (415) 494-8450.

Electronic Arts was trying to win back Atari loyalists with its ZANY GOLF. This miniature golf simulation has jumping hamburgers, holes that move, lasers and energy orbs.

Microdeal was demonstrating TALE SPIN, that lets you use ST-Replay sound files and Degas or Neo pictures, in condensed format, to create your own adventure games even if you have little or no programming experience. You have the option of creating games that can not be altered or leave them open for others to add to your adventure scenario.

Digital Laboratory Research instructed folks in music reading, harmony and theory with its AMADEUS ST. This is for the beginner and professional musician. Included are games that check your progress in addition to the scored practice sessions.

Then there was the POS computer system that uses a touch screen interface to allow customers in a restaurant to order food and drinks without waiting for a waiter or waitress. It also zaps you if you try to leave the table without leaving a tip (just kidding). I can see future enhancements, like games to play if the conversation gets boring or a personalized jukebox interface like in the 50s.

In the race for your lap it looks like Apple has announced a Summer release for their portable, while Atari's STACY hopes to be warming your lap by March. Reports indicate that she has a real nice looking screen....release of the 68030 is slated for mid 1989.

Before leaving Las Vegas for the last time, I just have to mention this hacker that was recently busted in one of the casinos trying to beat the black jack table. It seems he had rigged a pocket sized unit to a pressure pad in his foot, which when tapped on the floor in a particular sequence would count the cards. The output device, which was in his underwear, would vibrate when the program advised him to take another hit, giving new meaning to the phrase: "user friendly."

Prepare yourself for an absolute flood of new titles from Europe in the coming year. It's going to be real hard keeping up with them. If you have 64k in your 8-bit then you will soon be able to enjoy Ultima V, Warriors of Destiny. According to the Financial Times of London, the MIDI boom that Atari has helped create is starting to impact the recording industry financially. The ultra expensive recording studios are starting to suffer a loss of patronage due to the ground swell of inexpensive home MIDI studios. The net result is that musicians are now spending about 1/6 of the time they used to devote to their final cuts in the major studios.

If you'd like a real kick, check out the December issue of

CALIFORNIA Magazine. The cover article is "Who Are the Worst Bosses in California?" In the article the nine Bosses from Hell, the selections were based on 5 categories: hatcheting, screaming, slave driving, penny-pinching and being hard to read. Among this select group we find Dawn Steel, head of Columbia Pictures, called the "Queen of Mean," the CEO of B of A, a big time farmer accused of abusing farm workers, a religious con-man, some other slimes and our own Jack Tramiel. He is rated as a penny-pinching slave driver. The article quotes Business Week, "He is like a magnesium flare lit in a dark room. You may be left awed---but also choking because all the oxygen was used up." Jack also believes "...executives should think nothing of working round the clock, and should be willing to change positions as constantly as the firm demands." Former Atari executive Don Richard says, "Jack buys people the same way he buys goods." Which reminds me of what the head of a company close to Atari told me, who asked not to be quoted. He said, "Jack reminds me of a guy selling computers out of the trunk of his car." The bottom line though is that the Wall Street money barons love Jack's style. Well, 1989 should tell the story. This has got to be a make or break year for the ST line. Atari either produces and promotes or they will perish in this war of a business. I'm awaiting the results to buy my Mega.

Two PD ST files to keep an eye peeled for are: SHA-DOW11.ARC, that allows you to upgrade your original program to version 1.1. This has an expanded counter window that reflects errors, and the option to make the buffer resettable. The second file is MASTERS.ARC. This is a cheat program (a what?! you say) for DUNGEON MASTER that lets you start out with master level characters. My goodness, what will they think of next.

Goodbye till next time. Hope you made some happy holiday memories.

8 Bit Emulator Review

Paul Grover (ABE's ACEs)

At the February 11th monthly meeting, we received a preview by Steve Jones of Jonesware of his 8 Bit Emulator for the ST. Some of the members saw no need for an 8 bit emulator, but I feel that if the speed and sound come up to the 8 bit, the product will sell to some loyal 8 Bit Atari people who upgraded to the ST. I have to emphasize that after seeing the demo that the speed of the Emulator must equal the 8 bit so that its sound can be used. I also feel that the user who wants this Emulator does not need it for application software like Word Processors, Spread Sheets, or Databases but for some favorite games. It is the games that have a need for the speed and sound so as to work normally. I also feel that the cost will be important. It must cost \$50 to \$70 or less because you can buy a 130 XE for about \$120 or XE Game Machine for \$100 or just continue to

use your old one or buy a used one.

I for one can't wait to see Steve's final version and hope speed and sound come along as well as not needing one meg of memory to obtain desired results.

Another View by RAF

Ralph A. Fenner (ABE's ACEs)

Yesterday at a meeting of ABE's ACEs, myself, and others present were introduced to a preliminary version of the Jonesware 130XE Emulator Cartridge.

Since the first ST's started showing up in stores, there have been 8-bit users asking if they can run their software on it. As a former large scale 8-bit user myself, I assume they do this for two reasons. [1.] They have a large monetary investment in 8-bit software and feel that this money would be lost if they didn't have access to these programs on their new machine. [2.] They don't know any better.

Let me elaborate on number two (so I'm not attacked at the next meeting). The best of the application software for the 8-bit computers can't begin to compare in speed, power, and efficiency to equivalent programs for the ST. What does that mean? The bottom line is if you own an ST you won't be needing your copy of SynFile anymore.

So, if emulation isn't necessary for applications, the Jonesware 130XE Emulator Cartridge must have been created for games, right? Read on. There are many classic games for the 8-bit. One of my favorites, Shamus, was demoed using the emulator. Anyone who has ever enjoyed playing this fast paced action game would probably have gotten sick watching the game run at about 20% of its normal speed, with no sound. (EDITOR'S NOTE: The designer is aware of the need to improve speed and indicated that this will be addressed before he releases his final version)

So if games are unusable and there is no reason to run applications, why buy an 8-bit emulator cartridge?

As a postscript to the above, I would like to mention that the cost of the above device is approximately 75% of the cost of a real XE. Obviously the real machine would run up to speed and have sound (a keyboard too). NOTE: To emulate the 128k XE would require a 1 megabyte+ ST. Considering, [1.] the VERY small price difference between the emulator cartridge and the real thing, [2.] the advantage that the real 130XE can be connected to your TV set, [3.] and finally, that it can run simultaneously, playing games with your children while you're using the ST, it looks like Atari still makes the best XE emulator.

These opinions, of course, are my own.

STOS The Game Creator

Michael Skuczas (ABE's ACEs)

Well gang it looks like we have another dialect of BASIC coming at us. I heard of this program before on a BBS I call. I didn't think to check into it. Thought it might be some not so hot attempt at making game programming easier. Later I had to get a cable for a friend at a software dealer. While there I noticed on the shelf a copy of the program. The artwork was pretty decent and when I turned it over I was surprised. This appears to be a real serious attempt at making game program easy. After a further perusal I decided to purchase it. Getting home I quickly open the box and started reading the manual. It is a French creation being marketed by an English software house (it is also being sold by TERRIFIC Software thru ANTIC). That of course explains some of the odd spelling for the words CENTRE and COLOUR. It has command to change system messages from English to French. As I read further it mentions that it had 3 games on one disk, so I decided that this should be a good way to see if it was worth the money. After going through all 3 games I didn't feel I made a mistake buying it. I will make this statement, the games that came with it are quite good, but when you list them the listing needs something. That something is what a lot of authors of software always tell COMMENTS. Comments tells you what you are doing at that point as well as letting the user know what's going on. That was one negative point about the package. Most of the rest is pluses. While it is a line number oriented BASIC, it is fairly complete. Nothing too unusual about it until you get to the graphics and sound commands. This is where it tells you it's true function.

As we all know you can probably duplicate most if not all of the functions present in STOS with GFA Basic or C or some other language. But most of time that entails writing procedures or subroutines. With STOS they are already built in. Some of them are quite powerful. The two things that help STOS accomplish its task is: 1) It totally bypasses GEM. By not having to produce the GEM interface, you gain speed. 2) Interrupts. STOS makes extensive use of interrupts; it also makes use of the unused TRAPs. Mostly by these 2 techniques, alot of the functions can appear to run independent of the program. That is like the MUSIC command; after you load a music bank into memory and then invoke the command 'music n', n being a number, a tune will begin playing and continue to play even while you are entering a program or while action sequence is going on with no slow down. Similarly, sprites can be set to move through loop sequences that after started, continue without any further intervention on the program's part. Scrolling can be done and with the DEF SCROLL command sections of a screen can made to scroll at different

speeds and directions. With a good fifth to one quarter of the commands centered on game functions it is easy to see why they refer to STOS as a game development kit.

I could write some more but I want to spend some more time with it so I can give a more thorough review than the one I am doing now. But from the small amount of time I spent so far with it I give it a thumbs up. This is definitely a program for someone who wants to achieve professional results without having to learn "C", Assembler and those other higher level languages. I will leave with this one note, Mandarin/Jawx will be soon releasing in this country a compiler for STOS and that they are working on a sound digitizer, fractal generator and a disc of 600 predefined sprites, plus a disk of 6 compiled games. This is a system that should increase the amount of game software available for the ST. What the heck, it gives you chance to improve on a game you may have but you feel it could have been done a little bit better. So now you can do it yourself.

The Amiga vs The Atari ST

The Battle Revisited

Steve Marshall

Reprinted from Nybbles & Bytes

Ignored by IBM and Apple, the Atari ST and the Commodore Amiga continue to wage their little war over which computer is better. As an owner of both an Atari 1040ST and an Amiga 500 (both 1 meg), I feel somewhat better qualified than most to evaluate the relative merits of these two opponents.

But first, some background on myself so that my comments can be weighed for their objectivity and pertinence. I am a professional artist and intermediate level programmer. I bought my first computer (an Atari 800) back in 1983. I have had an Atari ST computer for 3 years and my Amiga 500 for 1 year. At the present time my Atari ST system consists of a 1 meg 1040ST, 20 meg hard drive, color and monochrome monitors and an IBM compatible 5 1/4" drive. My 1 meg Amiga 500 system consists of a Commodore color RGB/Composite monitor and dual double sided drives. Both systems share an NEC P6 24-pin printer as well as a Quadjet color ink-jet printer.

Before I begin, I just want to say that every computer user demands different things of his/her computer and his/her expectations are colored by many factors including computing experience and particular hardware/software combinations. Keeping all that in mind, what follows are my personal opinions based on my own experiences over the past year.

Both the Atari ST and the Amiga made their product debuts at around the same time, the summer of 1985. I looked at both

machines carefully, and finally chose the Atari 520ST for one important reason; it was a lot cheaper. Trameil's "Power Without the Price" won me over, and I opted for a \$900 investment (which I could barely afford) over a \$1900+ investment (which I definitely could not). I was a little dissatisfied that I wound up with a Chevy instead of a Cadillac but reasoned that it was better to drive than to walk.

Over the next two years I came to appreciate my ST, eventually upgrading to a 1040ST, but I still held out hope that one day I would have that Amiga with its 4096 color palette. That day came about a year ago, and, although I was happy with my ST, I was looking forward to the creative freedom that the Amiga promised. It's now a year later and my Amiga sits in the corner gathering dust. Except for when my kids play some games or when I need to do some file conversions for work, it has wound up being neglected while my ST continues to fulfill my daily requirements. How did I arrive at this perhaps surprising state? What follows are comparisons of the Atari ST and the Amiga based on my experience.

THE USER INTERFACE (or GEM vs Intuition/CLI) Both Atari ST and the Amiga make use of a graphic interface with mouse control, windows and drop-down menus. But alas, where Atari's GEM interface is simple to use and operate, the Amiga's Jekyll/Hyde combination of Intuition and CLI make desktop file operations painful and overly complex. For reasons I cannot fathom, only certain files (usually executable program files) contain icon information. Therefore, when using Intuition, many data files are invisible when you open a window. In fact, it is entirely possible to have a disk full of files (including text files, picture files, etc.) and have an empty window displayed. Consequently, in order to see what files you actually have on a disk, you have to run another program, called CLI (for Command Line Interface). CLI looks (and smells) like MS-DOS, one of many reasons I hate IBM-type computers. If you want to copy a text file to another disk, you can't just drag its icon to another window like you can on the ST. Nooooo, you have to type a command like:

```
-copy df0:text.doc df1:text.doc
```

Now, I can remember the syntax for copy but I find I forget the EXACT syntax for many of the commands required to perform simple file maintenance tasks, so I have to constantly refer to my AmigaDOS manual every time I want to do something. Amiga claims that they supplied both Intuition and CLI to please both the novice user (Intuition) and the so-called "power" user. I contend that they please no one with two interfaces that are awkward and incomplete in themselves.

Within 6 months, Atari had their Operating System in ROM. It's not perfect but it works well enough for the vast majority of users. And you can boot up and be working in a matter of seconds. The Amiga's Operating System is still on disk (they're now selling Workbench version 1.3) and takes what seems like

forever to boot. Once booted, the system requires the Workbench disk to be in the main drive for almost every computer operation. I bought my Amiga with one drive. I was soon complaining about the **CONSTANT** disk swapping between my Workbench disk and the program disks. I was told the only solution was to buy another drive and leave the Workbench disk in the main drive all the time!! Well, I did and that problem is now behind me, but really, what an absolutely ridiculous way to design a "new-generation" computer! On the Atari ST, when you want to print a text file to the screen or printer, all you have to do is click on the icon and select either **SHOW** or **PRINT**. It took me two weeks to find out how to accomplish the same thing on my Amiga. And it ain't pretty. Basically, you have to locate a couple of utility programs and run them. If those utility programs aren't on the disk you happen to have in the drive, you're out of luck (actually, that's another reason to buy that second drive and leave Workbench in it **ALL** the time).

Okay, I have to admit, most of my gripes concern the abominable Amiga desktop and operating system and I haven't started to tell about some of the good things about the Amiga. So lets move on.

GRAPHICS (or, the only reason to buy an Amiga) The Atari ST has a palette of 512 colors, the Amiga has a palette of 4096. The ST can display 8 shades of gray, the Amiga can display 16 shades. The ST can display 16 colors in low resolution, the Amiga 32. Using Spectrum, the ST can create masterpieces that use all 512 colors simultaneously. Using HAM mode, the Amiga can display pictures in all of its 4096 colors. Digitizing hardware/software on the Amiga make use of the extra color capability to create images that are photographic in quality. Paint programs like Deluxe Paint II, Digi-Paint and Photon Paint are marvelous programs and provide the artist (novice and professional alike) with sophisticated tools for creating beautiful works of art.

In the area of CAD and 3D imaging, the superior color capability of the Amiga allows for ray-traced animations that rival those of the networks. Unfortunately, there is a price to pay for these capabilities in terms of memory and time (a single ray-traced frame for a 3D animation may take 10-15 hours of computer time to render). I bought Sculpt 3D for the Amiga with the hopes of going beyond the color restrictions I found in CAD-3D on the ST but finally gave up and returned to the ST's Cyber Studio simply because Cyber's tools were easier to use and I found that I just could not create the animations I wanted to on the Amiga. The "superior" machine became a liability in terms of actually producing a finished product. But, given ample time and memory, the Amiga is a graphic tool that excels at creating dazzling pictures and lifelike images.

In addition, with interlaced display modes and overscan capability, the Amiga is ideal as a video tool. In the emerging

field of desktop video, the Amiga stands above all other low-cost computers, including the ST. But even though it is particularly well suited for video, it still requires expensive modifications and peripherals to make it an effective video tool. And it is a small percentage of users who will opt for that direction.

Unfortunately, the very attributes of the Amiga that make it an excellent video tool (interlace, overscan, etc.) make it horrendous for "normal" computing. The interlaced high resolution graphics mode flickers so badly as to render it practically unusable for desktop publishing, text processing or intricate CAD work. In those areas, I have to give the nod to the Atari ST.

Then there's the multi-tasking feature so highly touted by the Amiga people. Here again I feel that multi-tasking is a feature that only the "power" user will fully utilize. I have never used it and have never missed not having it on my ST. If multi-tasking were just a nice extra feature that I could ignore, that would be fine. But unfortunately multi-tasking is a powerful and extremely complicated operating system function that affects every piece of software written for the Amiga. I have been told by several software developers that writing for the Amiga is considerably more difficult because of the multi-tasking thereby making software more expensive to produce.

That leaves the "ENTERTAINMENT" software (aka video games). Here you would think that the Amiga would be head and shoulders over the competition with its extra color capability and hardware sprites. But my experience has been that the Amiga games are no more impressive than their ST counterparts. In fact, the best games introduced over the past few years (Sundog, Starglider, Dungeon Master and Starglider II) have all been developed and introduced **FIRST** on the ST!! I have compared versions of Defender of the Crown on both machines and fail to see a significant difference in the graphic quality. In fact, some new games (Starglider II, for example) are being released for both computers on the **SAME DISK**. Which means that the Amiga is basically emulating an ST!

I've rambled on at length here but I think you can see why my Amiga is sitting neglected. My ST is easier to use, provides all the graphics punch I require, and meets all of my computing needs. ST software is better, less expensive and there's more available. I find the Amiga to be slow, overly complicated, prone to crash and a real memory hog.

I have no desire to re-open up the "Great Debate". I just want to set the record straight. Other people who have used both machines concur with my findings. If you are trying to decide between an Atari ST and an Amiga, decide what you really want to use it for, and listen to the opinions of those who have had experience with both.

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